

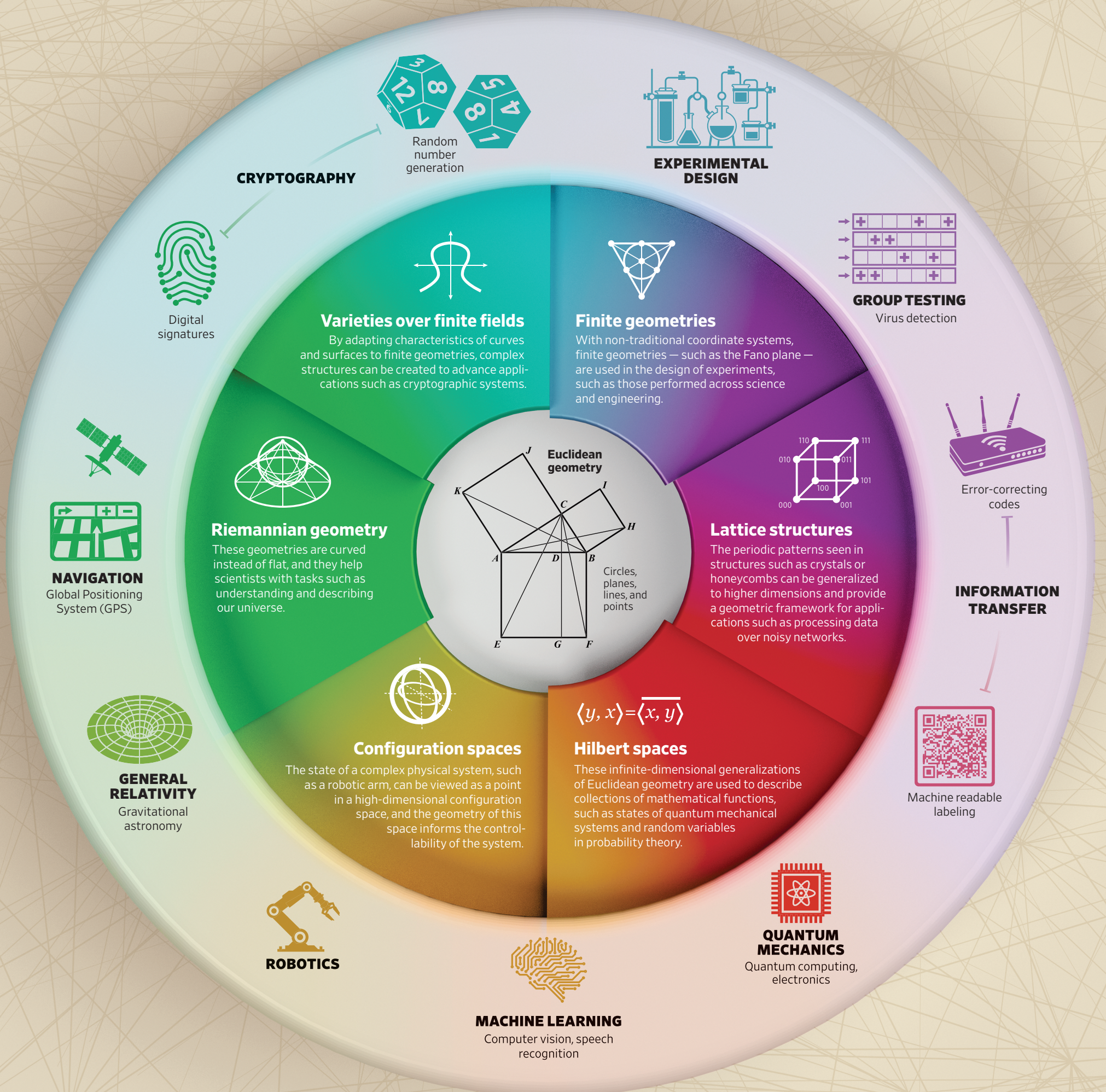
Concrete Impacts of Abstract Geometry

Mathematical theorems that were discovered hundreds of years ago continue to have real-world impact. Euclid, a Greek mathematician who lived around 300 BCE, systematically organized the geometry of points, lines, angles, circles, and planes into the world's first mathematically rigorous theory. Over the past two millennia, mathematicians have expanded upon this with concepts such as curved spaces, discretizations, and dimensions beyond three dimensions. These abstractions have enabled breakthroughs across domains, including data encryption and machine learning.

The **six inner sectors** contain different ways in which mathematicians have generalized the Euclidean notion of geometry.



The abstract geometries have led to practical and impactful applications in the **outer ring**.



MODERN SCIENCE AND TECHNOLOGY EMERGE FROM CENTURIES-OLD MATHEMATICAL CONCEPTS

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